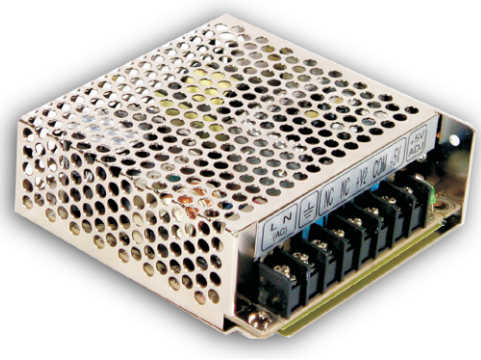
MEAN WELL DIRECT

50W Dual Output Switching Power Supply

RD-50 series



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105℃ long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70℃
- Withstand 5G vibration test
- High efficiency, long life and high reliability

SPECIFICATION

MODEL		RD-50A		RD-50B	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V
	RATED CURRENT	6A	2A	4A	1.4A
	CURRENT RANGE	0.3 ~ 6A	0.3 ~ 3A	0.3 ~ 6A	0.2 ~ 2A
	RATED POWER	54W		53.6W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	80mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±7.0%	±2.0%	-4,+8%
	LINE REGULATION Note.4	±0.5%	±1.5%	±0.5%	±1.5%
	LOAD REGULATION Note.5	±0.5%	±3.0%	±0.5%	±3.0%
	SETUP, RISE TIME	500ms, 20ms/230VAC 1200ms, 30ms/115VAC at full load			
	HOLD UP TIME (Typ.)	60ms/230VAC 12ms/115VAC at full load			
INPUT	VOLTAGE RANGE	88 ~ 264VAC 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	79%		80%	
	AC CURRENT (Typ.)	1.3A/115VAC 0.8A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 33A/230VAC			
	LEAKAGE CURRENT	<2mA / 240VAC			
PROTECTION	OVERLOAD	110 ~ 150% rated output power			
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V			
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-25 ~ +70℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)on +5V output			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH			
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level, criteria A			
OTHERS	MTBF	172.6Khrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	99*97*36mm (L*W*H)			
	PACKING	0.41Kg; 45pcs/19.5Kg/0.9CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 0% to 100% rated load. 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)				

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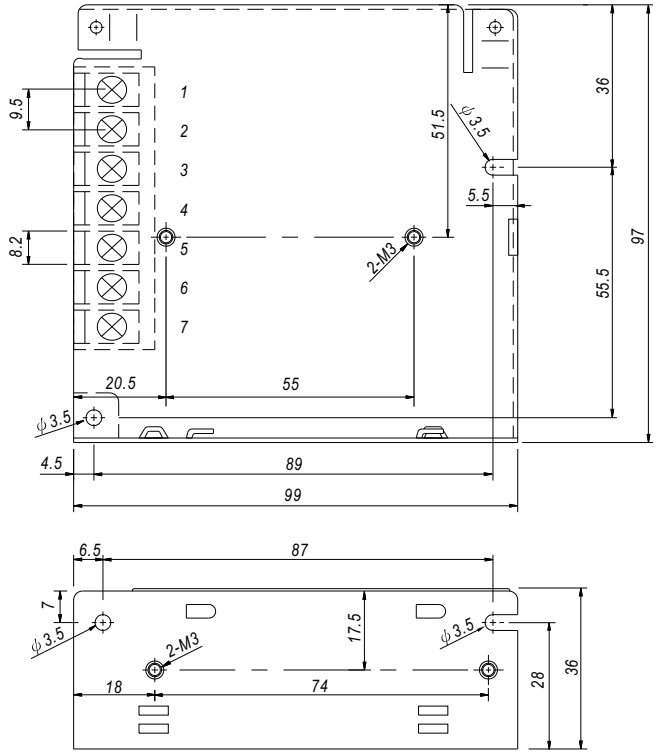
■ Mechanical Specification

Case No. 905B Unit:mm

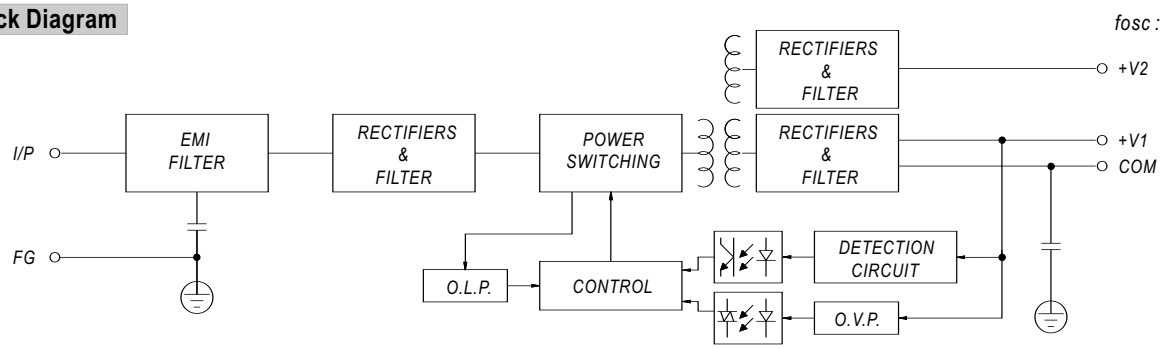


Terminal Pin No. Assignment

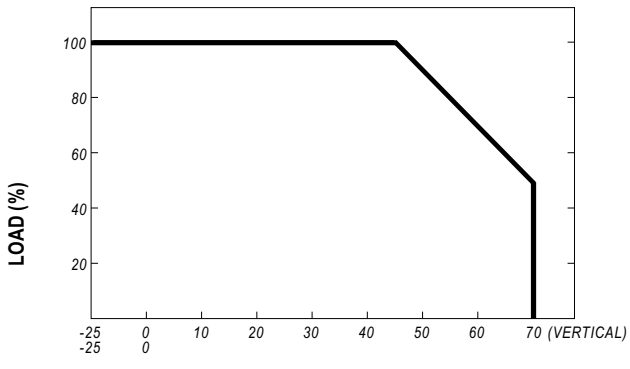
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,6	DC OUTPUT COM
2	AC/N	5	DC OUTPUT +V2
3	FG ⏚	7	DC OUTPUT +V1

■ Block Diagram

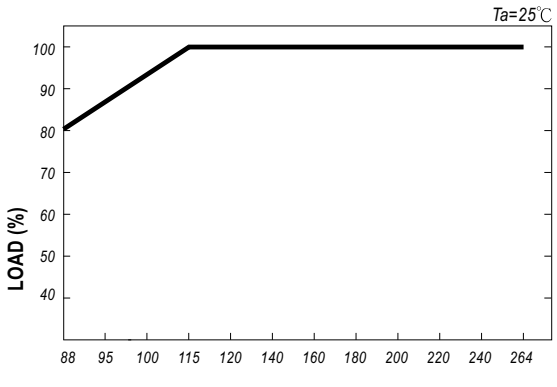
fosc : 60KHz



■ Derating Curve



■ Output Derating VS Input Voltage



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